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(54) **MYELOPEROXIDASE, A RISK INDICATOR FOR CARDIOVASCULAR DISEASE**

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G01N 33/68 (2006.01)

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See application file for complete search history.

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(57) **ABSTRACT**

Diagnostic tests for characterizing an individual's risk of developing or having a cardiovascular disease. In one embodiment the present diagnostic test comprises determining the level of myeloperoxidase (MPO) activity in a bodily sample obtained from the individual or test subject. In another embodiment, the diagnostic test comprises determining the level of MPO mass in a bodily sample obtained from the test subject. In another embodiment, the diagnostic test comprises determining the level of one or more select MPO-generated oxidation products in a bodily sample obtained from the test subject. The select MPO-generated oxidation products are dityrosine, nitrotyrosine, methionine sulphoxide or an MPO-generated lipid peroxidation products. Levels of MPO activity, MPO mass, or the select MPO-generated oxidation product in bodily samples from the test subject are then compared to a predetermined value that is derived from measurements of MPO activity, MPO mass, or the select MPO-generated oxidation product in comparable bodily samples obtained from the general population or a select population of human subjects. Such comparison characterizes the test subject's risk of developing CVD.

23 Claims, 11 Drawing Sheets